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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,865	07/23/2001	Shuichi Kagawa	2257-0193P-SP	1245

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EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 07/31/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/909,865

Applicant(s)

KAGAWA ET AL.

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-20 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 7/28/2001 which has been placed in the application file, the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3 and 5-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Deguchi et al (US 6,480,202).

As to claim 1, Deguchi et al teach an image display device including a black correction part (image processing section 100), color RGB data, output a black-corrected image data (702); a monitor; an image processing section 100 having: a black

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—display characteristic specifying means (black data of 712); a black-approximated data calculating means (713, 714, 715) including luminance (Y), chromaticity, and tristimulus (XYZ) values (see equation 58, column 28); a black-correction processing executing means 100 (see figure 16, column 24, line 13).

As to claim 2, Deguchi et al teach a black-correction processing executing means 100 including a subtraction processing based on the black-approximated data $X_{r,g,b,measured}$, $Y_{r,g,b,measured}$, $Z_{r,g,b,measured}$ from the predetermined number of color data RGB (see equation 58).

As to claim 3, Deguchi et al teach the subtraction data including the black-approximated data itself $X_{r,g,b,measured} - X_{k,min}$, $Y_{r,g,b,measured} - Y_{k,min}$, $Z_{r,g,b,measured} - Z_{k,min}$ (see equation 58).

As to claim 5, Deguchi et al teach a black correction means 100 including subtracting the XYZ3-stimulus values when the XYZ3-stimulus values is larger than the input digital signals of (0,0,0) and outputting said data after subtraction as the black-corrected image data (column 27, line 41).

As to claim 6, Deguchi et al teach the black-approximated data with a multiplication factor of less than 1 (see column 13, lines 55-67).

As to claim 7, Deguchi et al teach the black-correction processing executing means including a look-up table data (see figure 17, column 28, line 26).

As to claim 8, Deguchi et al teach the black-display characteristic specifying data including an ambient light information reflected by monitor surface (see figure 10).

As to claims 9 and 10, Deguchi et al teach a difference between the luminance (Y), tristimulus (x,y,z) based on the black-approximated data and the luminance, tristimulus are equal to the specified value (see equation 58).

As to claims 11-15, Deguchi et al teach the brightness, the kind of an external light, and the color temperature, the luminance (Y) (see figure 10), the chromaticity value and the mixing ratio (h'r, h'g,h'b) that provides a reference white point for the maximal quantities of light of R, G and B (see figure column 13, lines 12-38).

As to claim 16, Deguchi et al teach the black-display characteristic specifying data including a characteristic, luminance, chromaticity and tristimulus in displaying black with the monitor surface (see figure 16).

As to claims 17 and 18, Deguchi et al teach a difference between the luminance (Y), tristimulus (x,y,z) based on the black-approximated data and the luminance, tristimulus are equal to the specified value (see equation 58).

As to claims 19 and 20, Deguchi et al teach the brightness, and the luminance (Y) (see figure 10), the chromaticity value and the mixing ratio (h'r, h'g,h'b) that provides a reference white point for the maximal quantities of light of R, G and B (see figure column 13, lines 12-38).

Allowable Subject Matter

4. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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5. The following is a statement of reasons for the indication of allowable subject matter:

Deguchi et al teach a limiter $0 < r, g, b < 1$ and $0 < Y_{CRT} < 1$ (column 13, line 67). Accordingly, the cited prior art does not teach or fairly suggest a limiter setting a color data of less than "0" in said predetermined number of color data contained in said data after subtraction to "0", to obtain said black-corrected image data. This distinct feature renders the above limitation is allowable.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimomura et al (US 5,406,305), Yoon et al (US 5,757,438), and Clifton et al (US 6,388,648).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Examiner
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XIAO WU
PRIMARY EXAMINER